

**Abstract of the Disclosure**

An OFDM frequency control device converts an incoming signal from analog to digital and calculates  
5 a correlation value between the guard interval and data part from which the guard interval is copied, of the A/D converted incoming signal. Then, the device averages such correlation values for the first frame through a plurality of frames and detects the peak of the averaged  
10 correlation value. Then, by detecting the phase of the peak position, the device generates the control signal for an oscillator. The control signal is set in such a way that a control amount for each time should be a control step  $\alpha$  and is applied to the oscillator.  
15 Furthermore,  $\alpha$  is appropriately controlled based on detected information.